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WCDE-6KW-4X320LTL-LED-230V.50HZ

25' Portable Telescoping LED Light Tower - (4) 320W LED Fixtures IP65, 6 kW Generator - Water Cooled Diesel Engine, 230V, 50 Hz

Product ID: 306476



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

WCDE-6KW-4X320LTL-LED-110.220 Mobile LED Light Plant

Genset Specs:
Engine: Kubota D1105-BG-ET01
Engine Type: Vertical, liquid-cooled, 4-cycle diesel engine
Engine Speed: 1800 RPM
Generator: Marathon Pancake 6KW 4-Pole Brushless
Alternator: Class H/IP23
Auxiliary Power: 230V, 50 Hz
Battery: 12V
Runtime: 150 Hours
Fuel Cell Capacity: 150 Gallons
Fuel Delivery: Electric
Noise Level: Db level 63 @ 23 ft.

Light Mast Specs:
Mast Type: Manual Crank-Up
Boom Height: Up to 25`
Materials: Galvanized Steel
Operation: Manual Hand Crank Winch
Winch: (2) 1500lb, Self-Braking
Stages: Three

LED Light Specs:
Lamp Type: LED
Total Watts: 1,280 (320W per lamp)
Total Lumens: 166,400 (41,600 per lamp)
Luminous Efficiency: 164 Lm/W
LED Color Temperature: Cool White - 5500-6500K

Protection
6 KW Kubota Brushless Genset
150 Gallon Fuel Cell
Up to 150+ Hour Continuous Operation
External Grounding
Low Oil, High Engine Temp Auto Shut-Off
Hour Meter - Alternator Warning
High Output LED Lamps
Extreme Area Coverage
Direct Replacement for (4) 1000W MH Light Plants
166,400 Total Lumen Output
Independently Adjustable Light Heads
Individual Light Switch Circuit Breakers
Dial-in Adjustability per light head
98% Transmission High Purity PMMA Optics
Multiple LED Banks for Heat Dispersion
164 Lumens Per Watt Efficiency
70% Lumen Retention after 80,000 Hours
IP67 Waterproof LED Fixtures
Steel Trailer w/ Industrial Grade Paint Finish
Three Point Outrigger System
Withstands 65 MPH Winds at Full Extension

LED Life Expectancy: 80,000 hours
Optics Efficiency: 98% - PMMA High Transmittance Optics
Mounting: Trunnion Mount U-Bracket
Materials: Die Cast Aluminum Housing, Powder Coated Black Finish
Ambient Temperature Range: -40°C to +80°C
Waterproof Rating: IP67
Coverage: 2 Acres, 87,120 ft2 (80,093 m2)
Timer: Included

Trailer Specs:
Materials: Polyethylene Canopy, 12ga Formed Steel Chassis
Hitch: 2" Ball Coupler and 3" Pintle Hitch
Finish: Industrial Grade Paint
Axle: (1) 2,000 lbs.
Suspension: 2,000 lbs. Double Eye Leaf Springs
Outriggers: (4) Adjustable Outriggers w/ 2,500 lbs. Manual Leveling Jacks
Lighting: DOT Approved tail, side, brake, and directional lights
Wheels: (2) 13" 5x4.5 Steel Rims
Tires: ST175/80/D13

Special Orders - Special Requirements
Contact us for special requirements
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Made in the USA

The WCDE-6KW-4X320LTL-LED-230V.50HZ mobile light tower from Larson Electronics is a towable, self-contained LED light plant powered by a water cooled diesel engine turning a single bearing 4 pole generator which produces 6,000 watts at 230V, 50 Hz auxiliary power. The four 320-watt LED lamps included with this unit produce a combined total of 166,400 total lumens, illuminating a 2-acre (80,093 m2) outdoor area. This LED lighting package is a direct replacement for metal halide light plants. This trailer mounted light tower and generator set comes equipped with a 150 gallon fuel tank that will run continuously without refueling.

The WCDE-6KW-4X320LTL-LED-230V.50HZ mobile light tower is a self-contained towable light tower package that produces enough light to illuminate an area up to 2 acres (80,093 m2) in size. This unit contains a water cooled diesel engine powering a 6,000 watt generator, which supplies the current to four 320-watt LED lamps producing 41,600 lumens each for a combined total of 166,400 lumens of light. This unit can run uninterrupted for 150 hours straight without refueling and includes a telescoping light mast which can elevate the four LED lamps to a height of 25 feet. This mobile floodlight package is ideal for emergency services, large scale event illumination, construction, mining, industrial operations and anywhere an extended operation capable mobile lighting solution is needed.



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The WCDE-6KW-4X320LTL-LED-230V.50HZ mobile light tower incorporates a long list of impressive features. The diesel engine is a water cooled Kubota that operates at 1800 rpm. This engine features key operated electric starting, a full twelve volt electrical system, automatic low oil pressure and high temperature safety shutoffs, dual fuel filters and easy access oil and radiator drain ports to facilitate maintenance. A 150 gallon fuel tank allows the engine to operate for 150+ hours continuously without refueling. The 6,000 watt generator is a single bearing design and produces 230V 50 Hz auxiliary power. The generator uses a

four wire hookup system with an external ground allowing for setting up both electrical and mechanical safe grounding systems.
Lights: The lighting system on this unit is comprised of four, 320-watt LED lamps producing 41,600 lumens of light each attached to the end of the telescoping light boom. These floodlights produce a wide flood light pattern with a combined total of 166,400 lumens of light and can be rotated 360 degrees. Each floodlight is securely fastened to the light boom and each lamp includes a support bracket to help maintain lamp stability within its housing. Each light has its own on/off switch. The lamps have a 60° flood beam angle configuration for wide area illumination in outdoor areas. Operators can access a timer for setting light usage.
Heat Management: Heat is the single largest factor in premature LED failure and color shifting. These LED units feature individual heat sinks per bank of six LEDs to control heat buildup rather than utilizing a single housing to dissipate heat. This allows for more thorough cooling of the LEDs for extended operating periods. This allows the LEDs to be driven at up to 90% capacity without overheating or visible loss of light output. The end result is more light with less heat and longer LED life with an average 70% lumen maintenance after 80,000 hours. In addition, should an LED failure occur, these LED flood lights are field serviceable. Each bank of six LEDs can be replaced with the fixture installed. This allows for the tower to stay in operation until repairs can take place, and eliminates the need to remove and disassemble the entire fixture for repairs.
Durability: As well as unparalleled heat control, the GAU-LTL series of LED lights from Larson Electronics also offer IP67 rated construction that is designed to withstand extremes of environmental and operating conditions. These units can withstand rapid temperature changes of -40° Celsius to +80° Celsius, are waterproof, and resist ingress of dust, dirt and humidity. The housings are formed from die cast aluminum and the optics are high transmission PMMA with 98% light transmittance. The Cree LEDs help these units achieve resistance to vibrations and are rated at 70% lumen maintenance after 80,000 hours of use. We use these LED lights for applications where a lot of vibration, dust, dirt, dampness and abusive working conditions are encountered.
LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.
LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.



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Controls: The operations system for this unit is a centrally located control panel

within the light tower enclosure. Four circuit breaker protected switches allow individual control of the lights while an individual hour meter tracks unit operating time. Also included is an alternator warning light, fuel primer system, preheating switch and more.

Telescoping Boom: The telescoping boom consists of three sections extending up to 25 feet through the use of two manual self braking winches and allows for rotating the lights 360 degrees. One winch is mounted to the trailer tongue and acts to raise the tower into a vertical position while the other is mounted to the boom and is used to extend the tower to the desired height. The telescoping boom is constructed of galvanized steel to resist rusting and corrosion and is capable of withstanding 51 mph winds when extended to its full height and the stabilizing outriggers are deployed. The stabilizing outriggers are a three point design with one located under the trailer tongue and two on the rear sides of the unit. The two rear outriggers are adjustable and include 1,000 lbs. swivel jacks for leveling and stabilizing the tower.

Housing: All of the operating components are housed within a protective compartment constructed of recyclable LMDPE (linear medium density polyethylene) plastic. This material is extremely corrosion resistant and retains its original appearance even after years of use. The enclosure is high impact crack resistant and retains resale value for longer than metal counterparts while also minimizing environmental impact. The highly durable plastic material is fully UV stabilized, contains long term antioxidants and is resistant to both high and low temperatures. The plastic enclosure of the WCDE-6KW-4X320LTL-LED-230V.50HZ is significantly lighter than comparable metal enclosures while offering a more attractive appearance. A vertical lift door provides access to the interior while latches provide secure closing while the unit is in use. The entire unit can be loaded and unloaded onto trucks via forklift sleeves mounted to the outer section of the light mast. The entire unit is mounted onto a two wheel trailer with a 2,000 lbs. leaf spring axle. A standard two inch ball coupling, three inch pintle hitch and two standard safety chains allow for easy hookup and towing.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.



Frequently Asked Questions (FAQ)